



Nuclear energy field fascinates David Parkinson, chemical engineer

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David Parkinson gains relevant career experience

David Parkinson, an undergraduate student, gains relevant experience in his career field while working with the Actinide Engineering and Science group. He currently designs and tests a separator used in processing plutonium. Parkinson collaborates with his mentor on the entire design process, including researching different separator designs, creating models, and testing with modeling software.

A reaction involving plutonium creates outlet gases that are contaminated with particles. The newly designed separator removes the particles more efficiently than the current separator, therefore protecting equipment and saving costs. The plutonium from this process can be used for national defense or space programs. By safely and efficiently processing actinide materials, his group helps expand the scientific and engineering basis of nuclear weapons-based manufacturing.

Laboratory mentors commit themselves to planning student work, coaching and providing constructive feedback throughout the student's experience. Parkinson

comments on his mentor, saying, “He is really experienced and has taught me a lot about how the Lab’s science programs have grown and developed through the years.”

The Summer Lecture series are held annually at the Lab, featuring talks designed for students and postdocs. Parkinson describes his interest in the lectures, “The coolest thing about the Lab is hearing about the unique things people do here and learning about the broad diversity of science.” His favorite lecture was Laboratory Director Emeritus Sig Hecker on “Plutonium Science and Diplomacy.”

For two summers Parkinson worked as a student with the High Explosive Science and Technology group. He had the opportunity to transfer groups this year, helping him gain more experience in his field. He adds, “I hope to work in the field of nuclear energy. The work I do here fits in with my career goals.”

Parkinson grew up in Los Alamos and graduated from Los Alamos High School. He currently attends Brigham Young University in Utah, studying chemical engineering.

After he graduates, Parkinson will be working year round. He states, “I am excited to come back during the winter. The ski hill is so close.” Parkinson loves the outdoors, enjoying activities such as fishing, hiking, and skiing.

The Lab student programs provide students with real-world experience while they pursue their degrees. Parkinson recommends working at the Lab “because there are a variety of fields here; any top scientist can teach you and help you learn your future job.”

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